UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,667	06/28/2006	Jean-Philippe Starck	05-765	8348
	7590 06/09/200 BOEHNEN HULBER	EXAMINER		
300 S. WACKE		YOUNG, SHAWQUIA		
32ND FLOOR CHICAGO, IL	60606		ART UNIT	PAPER NUMBER
			1626	
		MAIL DATE	DELIVERY MODE	
			06/09/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary		Application No.		Applicant(s)					
		10/550,667	7	STARCK ET AL.					
			Examiner		Art Unit				
			SHAWQUI	A YOUNG	1626				
Period fo	The MAILING DATE of this commun or Reply	ication appe	ears on the	cover sheet with the o	correspondence ac	idress			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).									
Status									
1) 又	Responsive to communication(s) file	ed on <i>25 Fei</i>	bruary 200	8					
· · · · · · · · · · · · · · · · · · ·	•	2b)⊠ This a	<u>-</u>						
3)	Since this application is in condition	<i>'</i> —			osecution as to the	e merits is			
٥,١	closed in accordance with the practi		-	•		o monto lo			
Disnositi	on of Claims		. ,	y,					
				_					
•	Claim(s) <u>1-11,15,17 and 18</u> is/are pending in the application.								
	4a) Of the above claim(s) is/are withdrawn from consideration.								
	5) Claim(s) is/are allowed.								
·	Claim(s) <u>1-6,8-11,15,17 and 18</u> is/ar	re rejected.							
	7) Claim(s) <u>7</u> is/are objected to.								
8)	Claim(s) are subject to restric	ction and/or	election re	quirement.					
Applicati	on Papers								
9)	The specification is objected to by th	e Examiner							
10)	The drawing(s) filed on is/are:	: a) <u></u> acce	pted or b)	objected to by the	Examiner.				
	Applicant may not request that any obje	ction to the d	lrawing(s) be	held in abeyance. Se	e 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).									
11)	11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority ເ	ınder 35 U.S.C. § 119								
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>									
2)  Notic 3) Inform	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (F nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date	PTO-948)		4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	ate				

#### **DETAILED ACTION**

Claims 1-11, 15, 17 and 18 are currently pending in the instant application.

### I. Response to Arguments

Applicants' amendment, filed on February 25, 2008, has overcome the rejection of claims 1-11, 15, 17 and 18 under 35 USC 112, second paragraph as being indefinite. The above rejection has been withdrawn.

### II. Rejection(s)

#### 35 USC § 103 - OBVIOUSNESS REJECTION

The following is a quotation of 35 U.S.C. § 103(a) that forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Graham v. John Deere Co. set forth the factual inquiries necessary to determine obviousness under 35 U.S.C. §103(a). See Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966). Specifically, the analysis must employ the following factual inquiries:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.

Art Unit: 1626

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-6, 8-11 and 18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Morozov, et al. (See RN 132382-5, CAPLUS). Applicants claim a

compound of formula

wherein R<sup>1</sup> is hydrogen; R<sup>2</sup> is hydrogen or  $C_{1-20}$  alkyl;  $R^3$  is hydrogen,  $C_{1-20}$  alkyl,  $C_{4-8}$  cycloalkyl,  $C_{5-8}$  cycloalkenyl, aryl,  $C_{1-20}$  alkoxy or a group of formula –W-R<sup>8</sup>; R<sup>3a</sup> is hydrogen or C<sub>1-20</sub> alkyl; R<sup>4</sup> is hydrogen; R<sup>5</sup> is as defined in claim 1; R<sup>6</sup> is hydrogen, C<sub>1-20</sub> alkyl or halogen; R<sup>7</sup> is hydrogen, C<sub>1-20</sub> alkyl or halogen, W is C<sub>1-12</sub> alkylene, -NH- or -NHC(=O); R<sup>8</sup> is aryl and at least one of R<sup>5</sup>, R<sup>6</sup> and R<sup>7</sup> is different from hydrogen when R<sup>2</sup> is hydrogen, R<sup>3</sup> is H or 2,6-diisopropylphenyl and R<sup>3a</sup> is H.

## The Scope and Content of the Prior Art (MPEP §2141.01)

Morozov, et al. teaches 2,3-dihydro-2-oxo-1H-indole-1-acetamide and that it possesses anticonvulsive activity.

## The Difference Between the Prior Art and the Claims (MPEP §2141.02)

The difference between the prior art of *Morozov*, et al. and the instant invention is that there is homologous subject matter. The instant claims includes a proviso that at least one of R<sup>5</sup>, R<sup>6</sup> and R<sup>7</sup> is different from hydrogen when R<sup>2</sup> is

Art Unit: 1626

hydrogen,  $R^3$  is H or 2,6-diisopropylphenyl and  $R^{3a}$  is H. The definitions of  $R^5$ ,  $R^6$  and  $R^7$  include  $C_{1-20}$  alkyl (i.e. methyl). The prior art teaches a compound that has no substituents attached to the structure, which does not meet the instant claims' proviso.

### Prima Facie Obviousness-The Rational and Motivation (MPEP §2142-2413)

Applicants are claiming a compound of the formula wherein specifically at least one of R<sup>5</sup>, R<sup>6</sup> and R<sup>7</sup> is different from hydrogen when R<sup>2</sup> is hydrogen, R<sup>3</sup> is H or 2,6-diisopropylphenyl and R<sup>3a</sup> is H. The prior art reference of *Morozov, et al.* teaches a similar compound 2,3-dihydro-2-oxo-1H-indole-1-acetamide which does not have any substituents present.

In <u>In re Wood</u>, 582 F.2d 638, 1399 USPQ 137 (CCPA 1978), it was well established that the substitution of methyl for hydrogen on a known compound is not a patentable modification absent unexpected or unobvious results. For example, it is obvious to prepare an indol-2-one compound wherein at least one of R<sup>5</sup>, R<sup>6</sup> and R<sup>7</sup> is a methyl group when the art teaches a similar compound wherein only hydrogen atoms are attached to the indole ring (the hydrogen atoms are equivalent to the variables R<sup>5</sup>, R<sup>6</sup> and R<sup>7</sup> in the instant application) with a reasonable expectation of success.

Specifically, an unsubstituted indol-2-one derivative and a methyl substituted indole-2-derivative are considered obvious variants and are unpatentable absent unexpected results. Therefore, it would have been prima facie obvious to one having

Art Unit: 1626

ordinary skill in the art at the time the invention was made to prepare a methylsubstituted indol-2-one derivative based on the teachings of the preferred embodiments in the prior art. A strong prima facie obviousness has been established.

Claims 15 and 17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Macias* (See RN 39597-63-2, CAPLUS). Applicants claim a compound of formula

wherein  $R^1$  is hydrogen;  $R^2$  is hydrogen or  $C_{1-20}$  alkyl;  $R^3$  is hydrogen,  $C_{1-20}$  alkyl,  $C_{4-8}$  cycloalkyl,  $C_{5-8}$  cycloalkenyl, aryl,  $C_{1-20}$  alkoxy or a group of formula  $-W-R^8$ ;  $R^{3a}$  is hydrogen or  $C_{1-20}$  alkyl;  $R^4$  is hydrogen;  $R^5$  is as defined in claim 15;  $R^6$  is hydrogen,  $C_{1-20}$  alkyl or halogen;  $R^7$  is hydrogen,  $C_{1-20}$  alkyl or halogen, W is  $C_{1-12}$  alkylene, -NH- or -NHC(=O);  $R^8$  is aryl and at least one of  $R^5$ ,  $R^6$  and  $R^7$  is different from hydrogen when  $R^2$  is hydrogen,  $R^3$  is H or 2,6-diisopropylphenyl and  $R^{3a}$  is H.

# The Scope and Content of the Prior Art (MPEP §2141.01)

Macias teaches 1H-indole-1-acetamide and it use as a secretory phospholipase A2 inhibitors for the treatment of pain.

## The Difference Between the Prior Art and the Claims (MPEP §2141.02)

Art Unit: 1626

The difference between the prior art of *Macias* and the instant invention is that there is homologous subject matter. The instant claims includes a proviso that at least one of  $R^5$ ,  $R^6$  and  $R^7$  is different from hydrogen when  $R^2$  is hydrogen,  $R^3$  is H or 2,6-diisopropylphenyl and  $R^{3a}$  is H. The definitions of  $R^5$ ,  $R^6$  and  $R^7$  include  $C_{1-20}$  alkyl (i.e. methyl). The prior art teaches a compound that has no substituents attached to the structure, which does not meet the instant claims' proviso.

### Prima Facie Obviousness-The Rational and Motivation (MPEP §2142-2413)

Applicants are claiming a compound of the formula

whereir

specifically at least one of  $R^5$ ,  $R^6$  and  $R^7$  is different from hydrogen when  $R^2$  is hydrogen,  $R^3$  is H or 2,6-diisopropylphenyl and  $R^{3a}$  is H. The prior art reference of *Macias* teaches a similar compound 1H-indole-1-acetamide which does not have any substituents present.

In <u>In re Wood</u>, 582 F.2d 638, 1399 USPQ 137 (CCPA 1978), it was well established that the substitution of methyl for hydrogen on a known compound is not a patentable modification absent unexpected or unobvious results. For example, it is obvious to prepare an indole-1-acetamide compound wherein at least one of R<sup>5</sup>, R<sup>6</sup> and R<sup>7</sup> is a methyl group when the art teaches a similar compound wherein only hydrogen atoms are attached to the indole-1-acetamide ring (the hydrogen atoms are equivalent

to the variables R<sup>5</sup>, R<sup>6</sup> and R<sup>7</sup> in the instant application) with a reasonable expectation of success.

Specifically, an unsubstituted indole-1-acetamide derivative and a methyl substituted indole-1-acetamide derivative are considered obvious variants and are unpatentable absent unexpected results. Therefore, it would have been prima facie obvious to one having ordinary skill in the art at the time the invention was made to prepare a methyl-substituted indole-1-acetamide derivative based on the teachings of the preferred embodiments in the prior art. A strong prima facie obviousness has been established.

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 15 is rejected under 35 U.S.C. 102(b) as being anticipated by *Tius, et al.* (See RN 137641-76-0, CAPLUS), *Ganellin, et al* (RN 17380-11-9, CAPLUS) and *Smith, et al.* (See RN 680994-79-0, CAPLUS). The instant invention claims a product with the

Art Unit: 1626

formula wherein  $R^1$  is hydrogen;  $R^2$  is hydrogen or  $C_{1-20}$  alkyl;  $R^3$  is hydrogen,  $C_{1-20}$  alkyl,  $C_{4-8}$  cycloalkyl,  $C_{5-8}$  cycloalkenyl, aryl,  $C_{1-20}$  alkoxy or a group of formula  $-W-R^8$ ;  $R^{3a}$  is hydrogen or  $C_{1-20}$  alkyl;  $R^4$  is hydrogen;  $R^5$  is as defined in claim 15;  $R^6$  is hydrogen,  $C_{1-20}$  alkyl or halogen;  $R^7$  is hydrogen,  $C_{1-20}$  alkyl or halogen, W is  $C_{1-12}$  alkylene, -NH- or -NHC(=O);  $R^8$  is aryl and at least one of  $R^5$ ,  $R^6$  and  $R^7$  is different from hydrogen when  $R^2$  is hydrogen,  $R^3$  is H or 2,6-diisopropylphenyl and  $R^{3a}$  is H.

The *Tius, et al., et al.* reference teaches indole derivatives such as N-methoxy-N-methyl-1H-indole-1-acetamide (See RN 137641-76-0, CAPLUS). This species of compound anticipates the genus compound of the instant invention, wherein the genus structure and its definitions are stated above.

The *Ganellin, et al., et al.* reference teaches indole derivatives such as  $N,N,\alpha$ -trimethyl-indole-1-acetamide (See RN 17380-11-9, CAPLUS). This species of compound anticipates the genus compound of the instant invention, wherein the genus structure and its definitions are stated above.

The *Smith*, *et al.*, *et al.* reference teaches indole derivatives such as N-phenyl-1H-indole-1-acetamide (See RN 680994-79-0, CAPLUS). This species of compound anticipates the genus compound of the instant invention, wherein the genus structure and its definitions are stated above.

Art Unit: 1626

### III. Objections

### Claim Objections

Claims 1, 11 and 17 are objected to because of the following informalities: in claim 1, there is a period at the end of variable R<sup>3</sup>; in claims 11 and 17, the term "and" needs to be inserted in between the last two compounds.

#### **Dependent Claim Objections**

Dependent Claim 7 is objected to as being dependent upon a rejected based claim. To overcome this objection, Applicant should rewrite said claims in an independent form and include the limitations of the base claim and any intervening claim.

#### IV. Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shawquia Young whose telephone number is 571-272-9043. The examiner can normally be reached on 6:30 AM-3:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph McKane can be reached on 571-272-0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1626

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Shawquia Young/

Examiner, Art Unit 1626

/Kamal A Saeed, Ph.D./

Primary Examiner, Art Unit 1626